

Appl. No. 09/870,538
Amendment Dated May 27, 2005
Response to Office Action Mailed January 21, 2005

REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed January 21, 2005 in the above-identified application for Letters Patent.

Amendments to the Specification

The Specification has been amended to update the status of a co-pending applications previously identified as Attorney Docket No. 8504 and 8506.

Amendments to the Claims

Claims 1 - 39 were originally presented for examination.

Claims 38 and 39 were withdrawn as drawn to a non-elected invention.

Claims 1 and 18 are currently amended herein.

Claims 6, 10, 16, 21, 29 and 31-37 are cancelled herein.

Claims 1-5, 7-9, 11-15, 17-20, 22-28 and 30 remain in the application.

Response to the Office Action

As set forth in Section 2 of the Office Action, Claim 35 stands rejected under 35 U.S.C 112, second paragraph, as being indefinite because it recites being dependent upon itself. Claim 35 has been cancelled herein thereby making the rejection under 35 U.S.C 112 moot.

As set forth in Section 6 of the Office Action (page 3), Claims 1-3, 5-7, 9, 11, 12, 17-24, 30-35, and 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Klear et al. (WO 01 /03040) (cited by Applicant in IDS) (hereinafter Klear) in view of Dervarics (USPN 6,553,240).

As set forth in Section 16, page 6, of the Office Action , Claims 4, 8, 10, 13-15, 25-28, and 36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Klear in view of Dervarics as stated in claims 1-3, 5-7, 9, 11, 17-22, 24, 30-35, and 37 above, and further in view of Fidler (USPN 6,725,051).

As set forth in Section 22, page 8, of the Office Action, Claims 16, and 29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Klear in view of Dervarics as stated in claims 1-3, 5-7, 9, 11, 17-22, 24, 30-35, and 37 above, and further in view of Nakashima (US 2002/0174205).

As noted under the Summary of the Invention, starting at page 4 of the specification in the present application:

It is the primary object of this invention to provide users of mobile digital devices the opportunity to obtain a permanent record of the service rendered at the mobile device.

To achieve the object of this invention for services originating at the mobile device and not related to the location of the device, one aspect of the invention includes a method for providing a service at a mobile device and generating, at the location of the mobile device, a permanent record of the service, the service and the permanent record being processed by at least one of many remote servers. The method comprises the steps of (a) receiving at a receiving center, from the mobile device, a request for the service, (b) providing, from the receiving center, data for the request to a service server, the service server being one of the at least one of many remote servers, (c) processing the request for service at the service server, the processing generating the data for the service, (d) providing the data for the service to a printing server, the printing server being one of the at least one of many remote servers, (e) processing, at the printing server, the data and other stored data to generate input data for a specific printer, (f) transmitting to the mobile device the

input data, the input being rendered by the specific printer at the location of the mobile device as the permanent record of the service.

A feature of the present invention (as set forth in original Claims 6, 21 and 37) is to process the data that will be sent to a specific printer in a manner to produce the optimal quality print for the specific printer.

Thus, the novel combination of elements defining the methods and systems of the present invention, not only print out the record of the service on a specific printer at the location of the mobile device, but they are configured to process the data to provide an *optimal quality print for the specific printer*.

On page 13, third paragraph, and in Fig. 12, the Applicants disclose and teach how to optimize print quality by setting forth:

“Referring to Fig. 12, the printer database 400 comprises the name of the printer manufacturer 410, the printer model number 420, the printer imaging profile object 430, any other printer descriptor 440 and image processing descriptors 450. The methods described in U.S. Patent No. 6,128,415 are used to define the printer imaging profile object 430 (these two patents are previously further identified and incorporated by reference on page 11.) The printer imaging profile object 430 includes the printer resolution, the printed image size, printer spatial characteristics such as the Modulation Transfer Function and the Noise Power Spectrum, and printer color characteristics (if applicable). Image processing descriptors 450 provide preferences in rendering the image such as halftoning algorithms used and the parameters of such algorithms. Using the data in printer database 400 for a specific printer and the methods U.S. Patent No. 5,694,484, an image of optimum perceptual quality can be obtained.”

As shown in Fig. 7, printer information 160, identifying the printer and its characteristics is sent to the remote server via the mobile device where it is combined with optimizing data for that specific printer, see Fig 12. where print data (step 170) is processed in a manner to produce the optimal quality print for the specific.

To more clearly distinguish the patentably distinctive features of the present invention, Applicants have amended the independent Claims 1 and 18 to include the optimal quality print limitation therein and, thereby, including this limitation in all of the Claims 1-5, 7-9, 11-15, 17-20, 22-28 and 30 remaining in the application.

For convenience, illustrative currently amended Claim 1 is reproduced here:

Claim 1 (currently amended): A method of providing a service at a mobile device and generating, at the location of said mobile device, a permanent record of said service, said service and said permanent record being processed by at least one of a plurality of remote servers, said method comprising the steps of:

- (A) receiving at a receiving center, from the mobile device, a request for the service and information identifying a specific printer on which service related data is to be printed at the location of the mobile device;
- (B) providing, from the receiving center, data for the request to a service server, said service server being one of said at least one of a plurality of remote servers;
- (C) processing the request for service at the service server, said processing generating the data for the service;
- (D) providing said data for the service to a printing server, said printing server being one of said at least one of a plurality of remote servers and

including stored print data for optimizing the quality of prints printed on various specific printers;

- (E) processing, at the printing server, said service data and other stored print data for the identified specific printer to generate input data for a the specific printer in a manner to produce the optimal quality print for the specific printer.
- (F) transmitting to said mobile device said input data, said input being rendered by the specific printer at the location of said mobile device as the permanent record of said service.

As can be seen, in Claim 1 step (A) has been amended to include the limitation that the mobile device also provides to the receiving center information identifying a specific printer on which service related data is to be printed at the location of the mobile device,

Step (D) has been amended to include the limitation that the printer server also includes stored print data for optimizing the quality of prints printed on various specific printers; and

Step (E) has also been amended to read: processing, at the printing server, said service data and other stored print data for the identified specific printer to generate input data for a the specific printer in a manner to produce the optimal quality print for the specific printer.

In Section 7 of the Office Action, Claims 1-3, 5-7, 9, 11, 12, 17-24, 30-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klear in view of Dervarics.

With reference to Claim 1, in Section 7 (page 4, third paragraph and extending onto page 5) the Office Action states:

“Referring to claim 1, Klear discloses a method of providing a service (i.e. purchasing tickets to a movie) at a device and generating, at the location of said device a permanent record (i.e. bar-coded receipt) of said service, said service and said permanent record being process by at least one of a plurality of remote servers (Figure 5, ref. 26), said method comprising the steps of:

receiving at a receiving server, from the device a request for the service (i.e. request to purchase tickets to a movie) (p. 10, lines 28-30);

providing from the receiving center, data for the request to a service server, said service center being one of said at least one of a plurality of remote servers (p. 10, lines 28-30);

processing the request for service at the service server, said processing generating the data for the service (i.e. generating a response acknowledging the purchase of the movie tickets) (p. 10, lines 28-34);

providing said data for the service to a printing server (i.e. the movie theater POS server), said printing server being one of the plurality of remote servers (p. 10, lines 28-34);

processing, at the printing server, said data and other stored data to generate input data (i.e. bar coded ticket) for a specific printer (it is inherent that if an object is to be printed it must be formatted in a manner such that it can be read by the printer);

transmitting to said device said input data, said input being rendered by the specific printer at the location of said device as the permanent record (p. 10, lines 28-34).

Klear does not disclose that the device is a mobile device and that the input

data transmitted to the mobile device is rendered by the specific printer at the location of the mobile device. In analogous art, Devarics discloses another method to print information off of the Internet which allows input data transmitted to the mobile device (i.e. WAP device 100) to be rendered by a specific printer 120 at the location of the mobile device (it is understood that infrared 110 is a proximal method of communication between devices and that the printer must be at the location of the WAP device 100) (Figure 1; col. 7, lines 29-44). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Devarics with Klear since Klear discloses the usage of purchasing movie tickets via a portable device stored on the portable device without needing a hard copy while the PC requires a printout copy of the bar code (p. 10, lines 19-32). This would lead one of ordinary skill in the art to search to combine these two methods eventually arriving at Devarics and its novel method of transferring WAP printing data to a wireless printer via an infrared link (Figure 1)."

The *optimal quality print* limitation, originally appeared in dependent Claims 6, 21 and 37 (which have been cancelled here) but now have been added, by current amendment herein, to independent Claims 1 and 18 and thereby are now included by dependency to all the remaining Claims in the application.

Because of the addition of the optimal quality print limitation to all of the remaining claims, the following statements in the Office Action , in Section 11, page 5, is relevant here. It states:

"Referring to claim 6, Klear discloses processing the data for the service to generate input data to produce the optimal quality print for a specific printer (p. 10, lines 28-32)."

Applicants respectfully submit that this assertion is in error and can not support the rejection herein of Claims 6, 21, and 37 and any and all of the remaining claims herein which now include this optimal quality print limitation.

Klear, at the cited page 10, lines 28-32, states:

“In another embodiment, a registration form is first completed by the user in an initialization process. Subsequently, the user selects an event and pays for the ticket with, for example, a credit card in a secure e-commerce transaction. Then, in this embodiment, a bar coded ticket or receipt is generated and printed by the user. With the bar coded ticket or receipt in hand, the user avoids the box office lines and proceeds directly to an attendant or POS who collects the ticket, verifies the purchase optionally automatically via a bar code reader, and admits the user to the movie screen.”

Nowhere in this cited passage does Klear disclose, teach or even suggest that the concept that print data be processed in a manner to produce the optimal quality print for the specific.

Nowhere in this cited passage does Klear disclose, teach or even suggest using the mobile device to provide the service servers with information identifying a specific printer on which service related data is to be printed at the location of the mobile device; providing, at the printer server, stored print data for optimizing the quality of prints printed on various printers; and, for the identified specific printer, generating input data for the specific printer in a manner to produce the optimal print for the specific printer.

Nowhere in this cited passage does Klear disclose, teach or even suggest how to make an *optimal quality print* as clearly disclosed by the Applicants, for

example, in the last paragraph on page 13 of the present application and set forth above herein.

Klear is primarily directed to recording service or transaction data electronically on media such as a smart-cards and the like and makes few references to printing a ticket or receipt. In addition to the printing reference on page 10, lines 28-32, there are additional references about printing in Klear. At page 7, line 6, one of the objects of his invention is to print fewer tickets. At page 12, lines 15-16, there is another reference to printing fewer tickets. At page 27, line 20, there is a reference to a written ticket or receipt. At page 29, lines 32-35, there is reference to a printed ticket. At page 32, line 24, there is another reference to a printed ticket. At page 47, lines 11-12 there is a reference to an e-ticket which the user prints out. At page 49, lines 31-33 there is yet another reference to printing out an e-ticket.

However, in all of these additional references to printing, Klear never discloses, teaches, suggests or even hints at processing the print data, as disclosed and taught by the Applicants, in a manner to produce the optimal quality print for the specific printer.

For this reason Applicants respectfully submit that Klear is not an appropriate reference for the producing the optimal quality print for the specific printer in the context for the methods and systems defined by the currently amended claims remaining in the application.

In rejecting Claims 1-3, 5-7, 9, 11, 12, 17-24, 30-35 and 37 under 35 U.S.C. 103 (a) Klear was combined with Dervarics which discloses, in Fig.1, a WAP mobile device (such as cell phone 100) that is configured WML web page data, and internal data such as calendar and phone book information.

In Fig. 3 and beginning at Column 6, line 45 and continuing onto Column 7, Dervarics discloses the phone has a print facility *integrated into the source code of the operating system* software for the cell phone. The printing facility is shown in block diagram form in Figure 3.

At column 7, starting at line 10, notes that-- A printing module 304 contains a printer buffer 304-1 and printing routines 304-2. The printing routines 304-2 are preferably part of the browser, but utilize the appropriate application programming interface (API) of the operating system software to implement the printing facility of the mobile phone ---.

At column 7, beginning at line 18, it is disclosed that the character width of the display 207 controlled by the display module 303 is typically much narrower than the character width of the printing facility controller by printing module 304. WML decoder 301 makes the necessary conversions and wrap-arounds so that the decoded WML data displayed on display 207 can be suitably printed.

Also in Claim 12 of Dervarics, it states --- wherein said printer option causes said WML data to be printed on an external printer with the characteristic width of the printed WML modified according to the characteristics of the external printer.

It is clear that Dervarics disclose the use of software, within the cellphone, to convert the narrowly formatted WML data for the display to a wider width that is compatible with an identified local printer at the location of the cellphone.

However, Dervarics does not disclose, teach or suggest the methods and systems set forth in the currently amended claims wherein information identifying a specific local printer is sent to the remote servers at the service provider via the mobile device; a remote printing server has stored print data for optimizing the quality of print printed on various specific printer; and the printing server process

service data and stored print data for the identified specific printer in a manner to produce the optimal quality print for the specific printer.

To the contrary, Dervarics focuses on WAP capable mobile devices and at Column 3, starting at line 45 notes --- The WAP device 100 differs from the personal computer with internet browser 139 in that it generally has a less powerful CPU, less memory, restricted power consumption, smaller displays and more limited network devices--.

Because Dervarics does his print data processing locally in the limited resource cell phone it is clear that the phone does not have the capacity to do the type print optimization process taught by the Applicant in the current application. He does not disclose, teach or suggest the concept of doing computer intensive print optimization processing on high capacity remote servers operated by the service provider.

For these reasons Applicants respectfully submit that Dervarics does not disclose, teach or even suggest Applicants' methods and systems for providing optimal quality prints on an identified specific printer at the location of the mobile device and that the currently amended claims patentably distinguish over Dervarics whether taken alone or in combination with Klear.

Also the Applicants' methods and systems for providing optimal quality prints on an identified specific printer at the location of the mobile device are not disclosed, taught or even suggested in either of the cited Fidler or Nakashima. Applicants respectfully submit that the currently amended claims patentably distinguish over Fidler or Nakashima whether these two references are taken alone or in any combination with each other or the previously noted Klear and/or Dervarics references.

For these reasons and those above, Applicants respectfully submit the currently amended remaining Claims 1-5, 7-9, 11-15, 17-20, 22-28 and 30 clearly and patentably distinguish over the cited prior art and should be allowed.

As noted earlier Claims 4, 8 10, 13-15, 25-28 and 36 (claim 36 cancelled herein) stand rejected under 35 U.S.C. 103(a) as being unpatentable over Klear in view of Dervarics and further in view of Fidler.

The methods and systems defined by the currently amended claims are basically directed to providing, from a remote service provider, a service at a mobile device and generating, a the location of the mobile device, a permanent record of the service in the form of a printed record which is printed on a specific printer with input data that has been processed by a remote printer server in a manner to produce the optimal quality print for the specific printer. There are any number of services including purchasing a ticket or obtaining a coupon for a marketing promotion or a product discount.

The present method and systems also have an extended embodiment which extends their capability to encompass *location based services*. Such location based services require the selected service provider to obtain the geographic location of the mobile device carried by a user. Once located the service provider can provide local information such as the names, locations and menus for restaurants close to the user or the location of movie theaters in the vicinity of the user.

The above noted group of Claims 4, 8 10, 13-15, 25-28 have a commonality in that, in addition to the optimal quality print limitations, they all include limitations that are directed to the location based service aspects of the Applicants' methods and system.

Claims 4, 8, 10, and 13-15 depend directly or indirectly from currently amended independent Claim 1 and add further limitations thereto. For example Claim 4 depends directly from Claim 2 and adds the limitation -- receiving at the receiving server, prior to step (C), data on the location of the mobile device, said data being generated by means for determining the location of the device. Claims 8, 10 and 13-15 directly depend from Claims 4 and add various limitations thereto including that receiving server is a service server: the requested service is a location based service; the means for determining location comprise a device based method; and the means for determining location comprise a network based method.

Claims 25-28 depend directly or indirectly from currently amended independent Claim 18 and add further similar limitations thereto. Claim 24 depends directly from claim 18 and adds the limitation that the receiving center is a receiving server. Claim 25 depends directly from Claim 24 and adds the limitation that the means for receiving, at the receiving server, data on the location of the mobile device, said data being generated by means for determining the location of a device. Claims 26-28 each depend directly from Claim 25 and add the limitation that the requested service is a location based service; the means for determining location comprise a device based system; and the means for determining location comprise a network based system.

In rejecting these location based dependent method and system claims, the Office Action uses a flawed basic argument that is typified in the following statement regarding the rejection of claims 4, 14 and 15:

“Referring to claim 4, Klear in view of Devarics discloses the invention substantively as described in claim 2. Klear in view of Devarics do not specifically disclose receiving at the receiving server data on the location of the mobile device, said data generated by means for determining the location of the device. In analogous art, Fidler discloses another location based service provider which discloses receiving

at the receiving server data on the location of the mobile device, said data generated by means for determining the location of the device (col. 2, lines 3-14). It would be obvious to a person of ordinary skill in the art at the time the invention was made to combine teaching of Fidler with Klear and Dervarics in order to allow the mobile device the ability to provide the location information rather than the user, which may be tedious or unknown to the user, which can also speed up the process since the computer can determine the location much quicker than the user can input it manually.”

Fidler is directed to a method for obtaining location data for use by a peripheral device. As set forth a Column beginning at line 50. The method includes the steps of communicating with a second device via a wireless protocol and querying the second device for location data. To one having ordinary skill in the art, Fidler would appear to be at best, a diagnostic tool for a network administrator.

In contrast, the present invention is directed to an *interactive service* in which a *user* requests a *location based service* (nearby restaurants etc,) from a *service provider* which needs the location of the mobile device to provide the user with appropriate location based service.

Fidler's method does not disclose, teach, suggest or even provide a hint regarding providing the interactive dialog between a user and service provider to obtain a location based service for the user and also lets the user make an optimal quality printed record of the service at the location of the mobile device.

Applicants respectfully disagree that Fidler is analogous art or that it would lead one skilled in the art to combine it with Klear and Dervarics to render these location based claims unpatentable.

Applicants respectfully submit that there is no linkage between Klear,

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Dervarics and Fidler that would allow them to be combined and teach one skilled in the art the novel combination of components and elements defining the methods and systems of the present invention wherein the user of a mobile device interacts with a remote service provider and obtains a permanent record of their interaction. These three references merely disclose separate element and components of Applicants' invention and because they have no linkage, one skilled in the other would have no notion to combine them with the Applicants' disclosures in the present application.

Furthermore, the prior art references do not contain any suggestion (express or implied) that they be combined or that they be combined in the manner suggested.

For these reasons, Applicants respectfully submit that Claims 4, 8 10, 13-15, 25-28 clearly and patentably distinguish over the Klear, Dervarics and Fidler references, taken alone or in any combination, and should be allowed.

Because claims 16 and 29 have been cancelled herein, the rejection of these claims in Section 22 of the Office Action is moot and need not be addressed here.

For all of the above reasons, Applicants submit that the Specification and Claims are now in proper form, and that the Claims all patentably define over the prior art. Therefore, Applicants submit that this Application is now in condition for allowance, which action they respectfully solicit.

Respectfully submitted,



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